

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,260	08/20/2003	David Hooper	06769.P001	7336
7590 08/11/2006			EXAMINER	
James C. Scheller			TRAN, TUYETLIEN T	
BLAKELY, SO	KOLOFF, TAYLOR & 2	ZAFMAN LLP		
Seventh Floor			ART UNIT	PAPER NUMBER
12400 Wilshire Boulevard			2179	
Los Angeles, CA 90025			DATE MAILED, 00/11/2004	•

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/645,260	HOOPER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Tuyetlien T. Tran	2179				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20 A	uaust 2003.					
	action is non-final.					
<i>'</i>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
· _						
4) Claim(s) 1-62 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-62 is/are rejected.						
7) Claim(s) is/are objected to.	r alastian requirement					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10) The drawing(s) filed on 20 August 2003 is/are:	a)⊠ accepted or b)☐ objecte	d to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. S	See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is	objected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	ce Action or form PTO-152.				
Priority under 35 U.S.C. § 119		•				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicative documents have been rece u (PCT Rule 17.2(a)).	ation No ived in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/20/03.	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:					

Application/Control Number: 10/645,260 Page 2

Art Unit: 2179

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-23 and 48-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, an "image asset organizer" is being recited; however, as disclosed by the specification, a system is taught to be software, per se. A program with no structural and functional interrelationship between computer elements is computer software by itself.

As to claim 48, it is similar in that it is a computer program claimed without a computer readable medium capable of producing a useful result, concrete and tangible result when used in the computer system.

Claims 2-23 and 49-54 are rejected as incorporating the deficiencies of a claim upon which it depends.

## Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 recites the limitation "the file header" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim. For examination purpose, the claim is interpreted as being dependent on claim 27.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-3, 6, 9-14, 24-26, 29, 32-37, 47-49, 51-52, 55-56, 58-59 and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Borden, IV (Pub No. US 2002/0140820 A1, hereinafter Borden).

As to claim 1, Borden teaches:

A calendar-based image asset organizer (a calendar based photo browser, see [0001]), comprising:

a user interface (a calendar user interface 10, see Fig. 1 item 10) for designating at least one date range (see e.g., [0016] lines 7-11);

an image date reader (it is noted that in order to associate the date of an image to the corresponding date range, a software component is implicitly reading the creation

Art Unit: 2179

date of an image, see [0017] lines 1-8) for determining a date associated with an image (i.e., each image has an associated date with it, see [0017] lines 1-3); and

an image query manager (i.e., the software component that categorizes images with the corresponding date range, see [0017] lines 8-16) for identifying (i.e., signifies, see [0018] line 1) images having an associated date within the at least one designated date range (see e.g., [0018] lines 1-6).

As to claim 24, this claim differs from claim 1 only in that claim 24 is a method claim whereas, claim 1 is an apparatus claim. Thus claim 24 is analyzed as previously discussed with respect to claim 1 above.

As to claim 47, this claim differs from claim 1 only in that claim 47 is a method claim with a computer readable medium (it is clear that the program code of the calendar-based photo browser is stored in a computer-readable storage medium to execute the steps that it has been assigned to perform; otherwise, the image files cannot be accessed through the calendar-based photo browser, see Fig. 1 and [0002]) whereas, claim 1 is an apparatus claim. Thus claim 47 is analyzed as previously discussed with respect to claim 1 above.

As to claim 48, this claim differs from claim 1 only in that claim 8 is an organizer of digital content whereas, claim 1 is an organizer of image asset. Borden further teaches a calendar-based digital content organizer (it is noted that the calendar based photo browser as disclosed in paragraph [0001] is also able to browse digital images or

Art Unit: 2179

digital video, see e.g., [0027]). Thus claim 48 is analyzed as previously discussed with respect to claim 1 above.

As to claim 55, this claim differs from claim 48 only in that claim 55 is a method claim whereas, claim 48 is an apparatus claim. Thus claim 55 is analyzed as previously discussed with respect to claim 48 above.

As to claim 62, this claim differs from claim 48 only in that claim 62 is a method claim with a computer readable medium whereas, claim 48 is an apparatus claim. Thus claim 62 is analyzed as previously discussed with respect to claim 48 above.

As to claim 2, Borden teaches wherein the user interface displays a calendar (a calendar 10, see Fig. 1 item 10).

As to claim 3, Borden teaches wherein a date range (it is noted that Fig. 1 item 10 show a date range of July 8-14, 2001) includes a date (i.e., July 8-14, 2001, see Fig. 1 item 10) and time range (i.e., morning or evening views 22, see Fig. 1 items 22; note that view 22 representative of the morning may be located higher within the respective date region, than views 22 representative of the evening, see [0021] lines 13-18), and wherein the date associated within an image (i.e., each image has an associated date with it, see [0017] lines 1-3) includes a date (i.e., year, month or day, see [0017] lines 3-6) and a time (i.e., hour, minute, seconds, morning, evening or afternoon, see [0017] lines 3-6).

Art Unit: 2179

As to claim 6, Borden teaches wherein the date associated with an image is a file system date (creation date, see [0015] lines 1-3) for a file containing the image (it is noted that the creation date is normally automatically associated with the corresponding file, see [0015] lines 8-10).

As to claim 9, Borden teaches further comprising a display processor (thumbnail view 60, see Fig. 1 item 60), for displaying representations of the images having an associate dates within the designated at least one date range (the thumbnail view 60 displays images within one or more selected date ranges, see [0022] lines 1-3).

As to claim 10, Borden teaches wherein the representations of the images are thumbnail representations (see e.g., Fig. 1 item 60 and [0018] lines 11-12).

As to claim 11, Borden teaches wherein the representations of the images are small-scale versions of the images (it is noted that thumbnail at the bottom of the display 12 is a small-scale version of the item 64, see Fig. 1; further note that the thumbnails are used to preview the images in a smaller format, see [0005]).

As to claim 12, Borden teaches wherein said image query manager identifies the number of images having an associated date within the designated at least one date range (i.e., the images are associated with the corresponding date range or a particular calendar presented, see [0017] lines 6-8).

As to claim 13, Borden teaches further comprising a display processor for displaying the number of images having an associated date within the designated at

Art Unit: 2179

least one date range (i.e., indicators 50 indicates the number of digital images associated with a respective date range, see Fig. 1 items 50 or [0021] lines 17-19).

As to claim 14, Borden teaches wherein said image query manager comprises a relational database manager for storing and retrieving image identifiers associated with specific dates (it is noted that in order for images to be presented to a user upon requested by select a date range, a relational database manager is implicitly included in the calendar-based photo browser, see [0017] lines 11-16).

As to claim 25, this claim differs from claim 2 only in that claim 25 is a method claim whereas, claim 2 is an apparatus claim. Thus claim 25 is analyzed as previously discussed with respect to claim 2 above.

As to claim 26, this claim differs from claim 3 only in that claim 26 is a method claim whereas, claim 3 is an apparatus claim. Thus claim 26 is analyzed as previously discussed with respect to claim 3 above.

As to claim 29, this claim differs from claim 6 only in that claim 29 is a method claim whereas, claim 6 is an apparatus claim. Thus claim 29 is analyzed as previously discussed with respect to claim 6 above.

As to claim 32, this claim differs from claim 9 only in that claim 32 is a method claim whereas, claim 9 is an apparatus claim. Thus claim 32 is analyzed as previously discussed with respect to claim 9 above.

Art Unit: 2179

As to claim 33, this claim differs from claim 10 only in that claim 33 is a method claim whereas, claim 10 is an apparatus claim. Thus claim 33 is analyzed as previously discussed with respect to claim 10 above.

As to claim 34, this claim differs from claim 11 only in that claim 34 is a method claim whereas, claim 11 is an apparatus claim. Thus claim 34 is analyzed as previously discussed with respect to claim 11 above.

As to claim 35, this claim differs from claim 12 only in that claim 35 is a method claim whereas, claim 12 is an apparatus claim. Thus claim 35 is analyzed as previously discussed with respect to claim 12 above.

As to claim 36, this claim differs from claim 13 only in that claim 36 is a method claim whereas, claim 13 is an apparatus claim. Thus claim 36 is analyzed as previously discussed with respect to claim 13 above.

As to claim 37, this claim differs from claim 14 only in that claim 37 is a method claim whereas, claim 14 is an apparatus claim. Thus claim 37 is analyzed as previously discussed with respect to claim 14 above.

As to claim 49, Borden teaches wherein the digital content is digital video (see e.g., [0027] lines 1-4).

As to claim 51, Borden teaches wherein the digital content is digital image collections (album 38, see Fig. 1 item 38).

As to claim 52, Borden teaches wherein the digital content is digital animation (digital video comprising a plurality of frames, see e.g., [0027] lines 1-4).

As to claim 56, this claim differs from claim 49 only in that claim 56 is a method claim whereas, claim 49 is an apparatus claim. Thus claim 56 is analyzed as previously discussed with respect to claim 49 above.

As to claim 58, this claim differs from claim 51 only in that claim 58 is a method claim whereas, claim 51 is an apparatus claim. Thus claim 58 is analyzed as previously discussed with respect to claim 51 above.

As to claim 59, this claim differs from claim 52 only in that claim 59 is a method claim whereas, claim 52 is an apparatus claim. Thus claim 59 is analyzed as previously discussed with respect to claim 52 above.

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 4-5, 7-8, and 27-28, 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden in view of http://Fototime.com/ftweb/fahelp/ (published web pages, "321.htm", "256.htm", "434.htm", hereinafter Fototime).

Art Unit: 2179

As to claim 4, Borden teaches the limitation of claim 1 for the reasons as discussed with respect to claim 1 above. Borden further teaches that wherein the date associated with an image (creation date, see [0015] lines 1-5) is a date stored by an image capture device (digital camera, see pp. 3, left column, lines 33-35). Borden fails to teach that the associated date is stored within a file header of a file containing the image.

Fototime teaches the date associated with an image is a date stored by an image capture device within a file header of a file containing the image (EXIF, see web page 256.htm; it is noted that EXIF is defined as file header in the applicant's specification, see applicant pp. 2, lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the file header format as taught by Fototime to the photo organizer as taught by Borden to extract the date information stored in the header file by an image capture device and thus release the user from manual data entry to speed-up processing time and to achieve a more accurate and reliable system (see Fototime web page 256 line 7).

As to claim 5, Borden in view of Fototime teaches the limitation of claim 4 for the reasons as discussed with respect to claim 5 above. Fototime further teaches wherein the file header is an Exchangeable Image File (EXIF) header (see web page 256.htm). Thus, combining Borden and Fototime would meet the claimed limitation for the same reason as discussed in claim 4.

Art Unit: 2179

As to claim 7, Borden teaches the limitation of claim 6 for the reasons as discussed with respect to claim 6 above. Borden fails to teach that the file system data is a file's last modified date.

Fototime teaches wherein the file system data is a file's last modified date (Pic Modified, see Figure on web page 434.htm).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the method of tracking the date on which an image is modified as taught by Fototime to the photo organizer as taught by Borden to determine whether and when a file has been modified and thus to be able to allow a user to retrieve images corresponding to files' last modified date (see Fototime web page 434.htm item Pic Modified).

As to claim 8, Borden teaches the limitation of claim 1 for the reasons as discussed with respect to claim 1 above. Borden fails to teach that the date associated within an image is date entered manually.

Fototime teaches wherein the date associated within an image is date entered manually by a user (it is noted that for an image that does not have a date embedded, Fototime allows a date to be entered manually, see web page 321.htm, lines 4-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the method of a date associated with an image to be entered manually as taught by Fototime to the photo organizer as taught by Borden to allow pictures or images that do not have the embedded date being included in the

calendar-based photo browser and thus to give a user the capability of managing not only images that have embedded dates but also the image that does not have a date associated with it (see Fototime web pages 321.htm, lines 4-6).

As to claim 27, this claim differs from claim 4 only in that claim 27 is a method claim whereas, claim 4 is an apparatus claim. Thus claim 27 is analyzed as previously discussed with respect to claim 4 above.

As to claim 28, this claim differs from claim 5 only in that claim 28 is a method claim whereas, claim 5 is an apparatus claim. Thus claim 28 is analyzed as previously discussed with respect to claim 5 above.

As to claim 30, this claim differs from claim 7 only in that claim 30 is a method claim whereas, claim 7 is an apparatus claim. Thus claim 30 is analyzed as previously discussed with respect to claim 7 above.

As to claim 31, this claim differs from claim 8 only in that claim 31 is a method claim whereas, claim 8 is an apparatus claim. Thus claim 31 is analyzed as previously discussed with respect to claim 8 above.

8. Claims 15-19, 38-42, 50 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden in view of Rothmuller et al. (Pub No US 2003/0033296 A1, hereinafter Rothmuller).

Art Unit: 2179

As to claim 15, Borden teaches the limitation of claim 14 for the reasons as discussed with respect to claim 14 above. Borden fails to teach that the image identifiers include identifiers for file names.

Rothmuller teaches wherein the image identifiers include identifiers for file names (i.e., pointers to photos, see [0017] lines 5-7; it is well-known in the art that the pointers to photo stored in the database is a path name to a photo file, which includes a file name).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the method of storing a file name or pointer to the file location in the database as taught by Rothmuller to the photo organizer as taught by Borden to allow the database to be considerably smaller and to lower maintenance task regarding database management as evidently disclosed by Rosebrock et al. (see Rosebrock et al, "Store images in Your Databse", Feb 2001, 3<sup>rd</sup> paragraph ).

As to claim 16, Borden teaches the limitation of claim 14 for the reasons as discussed with respect to claim 14 above. Borden fails to teach that the image identifiers include binary image data.

Rothmuller teaches wherein the image identifiers include identifiers for binary image data (i.e., entire photo can be stored in the database, see [0017] lines 5-7; it is well-known in the art that image file are stored in a computer as binary data).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the method of storing an entire photo in the database as taught by Rothmuller to the photo organizer as taught by Borden to allow

Art Unit: 2179

all images to be stored in a single and central location for quicker access as evidently disclosed by Rosebrock et al. (see Rosebrock et al, "Store images in Your Databse", Feb 2001, 3<sup>rd</sup> paragraph).

As to claim 17, Borden in view of Rothmuller teaches the limitation of claim 16 for the reasons as discussed with respect to claim 16 above. Rothmuller further teaches wherein the binary image data is pixel data for thumbnail representations of images (see thumbnail view in the image area 100, Fig. 1 item 100; it is noted that in order to display thumbnail view of the images, pixel data of the thumbnail is implicitly stored in the database). Thus, combining Borden and Rothmuller would meet the claimed limitation for the same reason as discussed in claim 16.

As to claim 18, Borden teaches the limitation of claim 14 for the reasons as discussed with respect to claim 14 above. Rothmuller teaches wherein the image identifiers include pointers to binary image data (i.e., pointers to photos, see [0017] lines 5-7). Thus, combining Borden and Rothmuller would meet the claimed limitation for the same reason as discussed in claim 15.

As to claim 19, Borden in view of Rothmuller teaches the limitation of claim 18 for the reasons as discussed with respect to claim 18 above. Rothmuller further teaches wherein the binary image data is pixel data for thumbnail representations of images (see thumbnail view in the image area 100, Fig. 1 item 100; it is noted that in order to display thumbnail view of the images, pointers are implicitly pointed to pixel data of the

Art Unit: 2179

thumbnails). Thus, combining Borden and Rothmuller would meet the claimed limitation for the same reason as discussed in claim 15.

As to claim 38, this claim differs from claim 15 only in that claim 38 is a method claim whereas, claim 15 is an apparatus claim. Thus claim 38 is analyzed as previously discussed with respect to claim 15 above.

As to claim 39, this claim differs from claim 16 only in that claim 39 is a method claim whereas, claim 16 is an apparatus claim. Thus claim 39 is analyzed as previously discussed with respect to claim 16 above.

As to claim 40, this claim differs from claim 17 only in that claim 40 is a method claim whereas, claim 17 is an apparatus claim. Thus claim 40 is analyzed as previously discussed with respect to claim 17 above.

As to claim 41, this claim differs from claim 18 only in that claim 41 is a method claim whereas, claim 18 is an apparatus claim. Thus claim 41 is analyzed as previously discussed with respect to claim 18 above.

As to claim 42, this claim differs from claim 19 only in that claim 42 is a method claim whereas, claim 19 is an apparatus claim. Thus claim 42 is analyzed as previously discussed with respect to claim 19 above.

Art Unit: 2179

As to claim 50, Borden teaches the limitation of claim 48 for the reasons as discussed with respect to claim 48 above. Borden fails to teach that the digital content is digital slide presentations.

Rothmuller teaches wherein the digital content is digital slide presentations (i.e., slide shows, see [0040] lines 6-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the calendar-based slide show browser as taught by Rothmuller to the photo organizer as taught by Borden to be able to manage, organize, find and to display not only digital images but also slide presentation (see Rothmuller [0040]).

As to claim 57, this claim differs from claim 50 only in that claim 57 is a method claim whereas, claim 50 is an apparatus claim. Thus claim 57 is analyzed as previously discussed with respect to claim 50 above.

9. Claims 53-54 and 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden in view of Peairs et al. (Patent No 6,085,205, hereinafter Peairs).

As to claim 53, Borden teaches the limitation of claim 48 for the reasons as discussed with respect to claim 48 above. Borden fails to teach that the digital content is electronic documents.

Peairs teaches wherein the digital content is digital document (i.e., document 506, see Fig. 5 item 506).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the calendar-based document browser as taught by Peairs to the photo organizer as taught by Borden to be able to manage, organize, find and to display not only digital images but also digital documents (see Peairs abstract).

As to claim 54, Borden teaches the limitation of claim 48 for the reasons as discussed with respect to claim 48 above. Borden fails to teach that the digital content is e-mail.

Peairs teaches wherein the digital content is e-mail (e.g., see col. 3, lines 44-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the calendar-based e-mail browser as taught by Peairs to the photo organizer as taught by Borden to be able to manage, organize, find and to display not only digital images but also e-mails (see col. 3, lines 44-47).

As to claim 60, this claim differs from claim 53 only in that claim 60 is a method claim whereas, claim 53 is an apparatus claim. Thus claim 60 is analyzed as previously discussed with respect to claim 53 above.

As to claim 61, this claim differs from claim 54 only in that claim 61 is a method claim whereas, claim 54 is an apparatus claim. Thus claim 61 is analyzed as previously discussed with respect to claim 54 above.

Art Unit: 2179

10. Claims 20-23 and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borden in view of Baskins et al. (Patent No 6,654,760 B2, hereinafter Baskins).

As to claim 20, Borden teaches the limitation of claim 1 for the reasons as discussed with respect to claim 1 above. Borden fails to teach that the image query manager comprises a data structure manager.

Baskins teaches wherein said image query manager comprises a data structure manager for storing and retrieving image identifiers associated with specific dates (a data processing system that includes a data structure and associated information which is stored in the memory for access by an application, see col. 4, lines 63-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the system of data processing as taught by Baskins to the photo query manager as taught by Borden to increase system efficiency by providing effective data management, achieved by the appropriate choice of data structure and related storage and retrieval algorithms (see Baskins col. 1, lines 39-42).

As to claim 21, Borden in view of Baskins teaches the limitation of claim 20 for the reasons as discussed with respect to claim 20 above. Baskins further teaches wherein the data structure is a tree (see col. 5, lines 11-27). Thus, combining Borden and Baskins would meet the claimed limitation to minimize allocation of unused memory because tree data structure does not require the pre-allocation of memory (see Baskins col. 1, lines 54-59).

As to claim 22, Borden in view of Baskins teaches the limitation of claim 20 for the reasons as discussed with respect to claim 20 above. Baskins further teaches wherein the data structure is a linked list (see col. 2, lines 6-10). Thus, combining Borden and Baskins would meet the claimed limitation to make use of memory in a more efficient way (see Baskins col. 2, lines 6-10).

As to claim 23, Borden in view of Baskins teaches the limitation of claim 20 for the reasons as discussed with respect to claim 20 above. Baskins further teaches wherein the data structure is a dynamic (see col. 4, lines 10-15). Thus, combining Borden and Baskins would meet the claimed limitation for fast indexing through the calculation of the address of a single array element (see Baskins col. 1, lines 50-54).

As to claim 43, this claim differs from claim 20 only in that claim 43 is a method claim whereas, claim 20 is an apparatus claim. Thus claim 43 is analyzed as previously discussed with respect to claim 20 above.

As to claim 44, this claim differs from claim 21 only in that claim 44 is a method claim whereas, claim 21 is an apparatus claim. Thus claim 44 is analyzed as previously discussed with respect to claim 21 above.

As to claim 45, this claim differs from claim 22 only in that claim 45 is a method claim whereas, claim 22 is an apparatus claim. Thus claim 45 is analyzed as previously discussed with respect to claim 22 above.

As to claim 46, this claim differs from claim 23 only in that claim 46 is a method claim whereas, claim 23 is an apparatus claim. Thus claim 46 is analyzed as previously discussed with respect to claim 23 above.

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Publication No. US 2003/0156138 A1 is cited to teach a calendar-based interface system for accessing computer information.

Patent No. 7,010,751 B2 is cited to teach a computer program for electronically annotating electronic images, such as photographs, video, etc....

Patent No. 6,990,481 is cited to teach a system and method for managing content across one or more storage devices systems.

Patent No. US 6,654,029 B1 is cited to teach a system for providing an integrated, efficient and consistent production environment for multimedia production.

Publication No. US 2004/0126038 A1 is cited to teach a method and system for automated annotation and retrieval of remote digital content.

## Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyetlien T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00 (every other Friday off).

Application/Control Number: 10/645,260 Page 21

**Art Unit: 2179** 

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on 571-272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

L.T 7/25/06 Lien Tran Examiner Art Unit 2179

CHANH D. NGUYEN SUPERVISORY PATENT EXAMINER